

*Flood stages during August, 1922.*

River and station.	Flood stage.	Above flood stages—dates.		Crest.	
		From—	To—	Stage.	Date.
ATLANTIC DRAINAGE.					
<i>Santee:</i>	<i>Feet.</i>			<i>Feet.</i>	
Rimini, S. C. ....	12	12	14	13.1	13
Do. ....	12	17	21	12.8	19
Ferguson, S. C. ....	12	(1)	1	12.0	1
Do. ....	12	13	24	12.7	1

<sup>1</sup> Continued from July.**MEAN LAKE LEVELS DURING AUGUST, 1922.**

By UNITED STATES LAKE SURVEY.

[Detroit, Mich., September 5, 1922.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes. <sup>1</sup>			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during August, 1922:	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>
Above mean sea level at New York.....	602.63	580.56	572.50	246.56
Above or below—				
Mean stage of July, 1922.....	+0.14	-0.11	-0.25	-0.36
Mean stage of August, 1921.....	-0.14	+0.38	+0.01	+0.63
Average stage for August, last 10 years.....	-0.09	-0.40	-0.28	-0.62
Highest recorded August stage.....	-1.30	-2.95	-1.61	-1.70
Lowest recorded August stage.....	+1.03	+0.71	+1.12	+2.21
Average relation of the August level to:				
July level.....		-0.10	-0.30	-0.30
September level.....		+0.20	+0.30	+0.40

<sup>1</sup> Lake St. Clair's level: In August, 575.33 feet.**EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS: AUGUST, 1922.**

By J. WARREN SMITH, Meteorologist.

The first half of August, 1922, was mostly cool for the season from the Mississippi Valley eastward, which somewhat retarded the ripening of summer crops, but the latter half was much warmer and crops matured rapidly. Rainfall was very unevenly distributed geographically, the amounts being scanty in much of the interior and the drought from Oklahoma southward and southwestward was intensified and had become severe at the close of the month. The lack of moisture that had prevailed in the far Northwestern States was largely relieved by copious rainfall near the middle of the month and beneficial rains were received in most sections from the Ohio Valley northward and northeastward during the latter part.

The month on the whole was generally favorable for harvesting small grains in the later districts and for threshing winter wheat, while late spring wheat was benefited early in the month by the showers that were received in the northern Rocky Mountain areas. Considerable rust was reported in spring wheat in eastern North Dakota, but it developed too late to cause widespread damage. Preparation of soil for the seeding of winter grain made rather slow progress in much of the interior of the country because of hard, dry soil, but conditions were improved in the lower Missouri and parts of the upper Mississippi Valleys, as well as in portions of the Great Plains area, by rainfall about the 20th.

The first half of the month was somewhat too cool for the best development of corn from the Lake region eastward and moisture was deficient during much of the month in some interior localities, particularly in parts of the Ohio Valley. The crop made good progress in most of the upper Mississippi Valley area and the late crop was favored in the Ohio Valley and eastern Missouri by the rains near the close of the month. The hot, dry weather was very unfavorable from Kansas southward, however, and late corn was severely damaged in that area. The crop matured rapidly during the last half of the month and at the close was mostly out of frost danger in the extreme northern Great Plains.

The weather was generally unfavorable for cotton in nearly all sections of the belt. The drought in the western cotton-growing States continued mostly unrelieved throughout the month and was accompanied during much of the time by extremely warm weather. Cotton made very good progress in limited areas where showers occurred, but on the whole general deterioration was reported in the western portion of the belt. There was less rainfall in the eastern portion than had been previously experienced, but it was rather too cool during much of the month, particularly during the latter part, with much cloudy weather. Picking and ginning advanced rapidly under favorable weather conditions and bolls opened fast, particularly in the western portion of the belt.

Grasses, truck, and miscellaneous crops were benefited by rainfall in the northeastern section of the country during the latter part of the month but it was too dry in most of the South, in much of the Great Plains area, and some other interior localities. Ranges were unfavorably affected by dry weather in the Southwest, except that conditions were fairly favorable in Arizona. At the close of the month stock were in very poor condition in most of New Mexico and only fair in much of western Texas.